

GUDE LANDFILL REMEDIATION

GLCC/DEP MEETING NO. 14

DATE: December 9, 2010
TIME: 7:30 PM to 9:00 PM
LOCATION: Montgomery County Transfer Station

ATTENDANCE:

<u>Name</u>	<u>Organization</u>	<u>Designation</u>
Laszlo Harsanyi	Gude Landfill Concerned Citizens (GLCC)	Member
Dave Peterson	Gude Landfill Concerned Citizens (GLCC)	Member
Nick Radonic	Gude Landfill Concerned Citizens (GLCC)	Member
Julia Tillery	Gude Landfill Concerned Citizens (GLCC)	Member
Peter Karasik	Montgomery County Dept. of Env. Protection (DEP)	Section Chief
Steve Lezinski	Montgomery County Dept. of Env. Protection (DEP)	Engineer III
John Kumm	EA Engineering, Science, and Technology, Inc	DEP Consultant

The Meeting Agenda is included as Attachment 1.

Contact information for attendees is included as Attachment 2.

Chronology of Closed Action and Follow-up Items is included as Attachment 3

Other Attachments are referenced within the text.

MINUTES:

- 1) Steve Lezinski of DEP requested approval of the draft minutes from GLCC/DEP Meeting No. 13. GLCC accepted the minutes as written.
- 2) Steve Lezinski reviewed DEP's Landfill Gas – Methane Mitigation Plan, which includes installation and tie-in with the gas collection system of 21 new gas extraction wells, installation of 5 new dewatering sumps to desaturate the waste mass around the gas wells, and a perched groundwater pumping program. The layout of the new extraction wells and dewatering sumps is provided as Attachment 4. Construction of these systems will commence on December 13, 2010. DEP anticipates that approximately 3 weeks will be required to complete the construction and connection of these systems.
- 3) Julia Tillery of GLCC asked about the plans for disposal of groundwater that will be removed from the landfill gas extraction wells or dewatering sumps. Steve Lezinski stated that DEP's Landfill Maintenance Contractor has a 6,000 gallon tanker truck, which will be used to store and transport groundwater pumped out of the gas extraction wells or dewatering sumps to the leachate pretreatment plant at Oaks Landfill. Peter Karasik of DEP explained that the system at Oaks removes particulates, as well as inorganic and organic pollutants before the treated leachate is discharged to the WSSC sanitary sewer system at the County Transfer Station, which is then routed

to the Blue Plains wastewater treatment plant for final treatment.

- 4) Steve Lezinski stated that DEP's leaf collection and processing service has used alternative sites so far this year and DEP only anticipates using the Gude Landfill site for processing natural wood waste in the event of a severe storm. Dave Peterson asked about the ultimate destination of leaf residues and Steve Lezinski confirmed that leaves and grass are ultimately processed into compost at the County Compost Facility located in Dickerson, MD.
- 5) Steve Lezinski presented DEP's Communication Plan for the Gude Landfill Remediation and Reuse Project. The Communication Plan included provisions established for communication from: DEP to the Community, the Community to DEP, DEP to Other Entities, and a Communication Schedule. The Communication Plan is included as Attachment 5. Steve Lezinski asked about the current level of citizen interest in the project. The Home Owners Association (HOA) Presidents stated that interest has been limited of late and that greater interest is anticipated after DEP receives feedback on the Nature and Extent Study Report from MDE. Peter Karasik confirmed that there would be a lot more to discuss once MDE responds to the report.
- 6) Julia Tillery stated that mailings from DEP directly to Derwood residents going forward would help to avoid possible confusion about project issues that might result from GLCC functioning as a communications intermediary. Julia requested that a one-page status report be developed and distributed. It was agreed that having the HOA Presidents physically distribute written communications to residents was logistically easiest. GLCC requested that DEP provide the following number of copies for each written communication or via electronic transmission:
 - Derwood Station 1 – Dave Peterson: 46 copies
 - Derwood Station 2 – Laszlo Harsanyi: 222 copies
 - Derwood Station South – Nick Radonic: 231 copies
 - Extras: 6 copies
 - Total: 505 copies
- 7) Peter Karasik stated that more targeted citizen communications might be required in the future if the remedial actions ultimately selected are more localized on the landfill, particularly along the Northwest property boundary.
- 8) Julia Tillery suggested that questions from residents could also be managed through the website. Steve Lezinski agreed that a query function would be set up on the project website and that questions received and DEP answers to the questions would both be posted on the site.
- 9) Nick Radonic of GLCC asked if dewatering activities at the landfill would affect the movement of groundwater. Steve Lezinski stated that the volumes being withdrawn to facilitate gas extraction would be small in comparison to potential existing groundwater volumes and it would not constitute a pump-and-treat remedial process.
- 10) Laszlo Harsanyi of GLCC asked about the potential Derwood property value impact of the Nature and Extent Study findings. Peter Karasik stated that it is difficult to predict since Derwood

residents knew they were moving in next to a closed landfill, but that the County Office of Real Estate and the County Attorney might be able to provide some insights.

- 11) Dave Peterson of GLCC raised the issue of a seller's obligation to divulge the findings of the nature and extent study to potential buyers and stated that real estate industry guidance may provide information on this. Peter Karasik stated that the County Office of Real Estate and the County Attorney might be able to provide some insights.
- 12) Julia Tillery asked about the overall timeline for the remediation and reuse. Steve Lezinski stated that from now until the completion of any remedial action would probably take approximately 4 years. A copy of DEP's latest remediation schedule is included as Attachment 6.
- 13) John Kumm of EA summarized the Remediation Feasibility Memorandum that EA has submitted to the County for review. This summary includes a preliminary analysis of several potential remedial actions including landfill capping, bioremediation, impermeable barriers, permeable reactive barriers, monitored natural attenuation and waste relocation. The different alternatives were compared and contrasted with respect to the following factors:
 - Compliance with Remedial Objectives
 - Short-Term Effectiveness
 - Long-Term Effectiveness
 - Implementability
 - Protection of Health
 - Reduction of toxicity, mobility, and volume
 - Regulatory Acceptance
 - Community Acceptance
 - Cost

DEP is in the process of reviewing the Memorandum and will provide comments to EA during the week of December 13, 2010. Once the Memorandum is finalized a copy will be provided to GLCC.

- 14) Julia Tillery asked about pump-and-treat as an alternative. John Kumm stated that EA had not evaluated pump-and-treat options for Gude since they were not appropriate for the site. All of the remedial options considered by EA are *in situ*, with the exception of waste relocation.
- 15) Dave Peterson asked about the similarity between the monitoring requirements of 40 CFR Part 258 Subpart E, which do not apply to Gude Landfill, and the current State-approved monitoring programs at the site. John Kumm stated that the current requirements were very similar and in some cases more comprehensive.
- 16) Dave Peterson asked about EA Engineering's experience with similar landfills in Maryland. John Kumm explained that EA has supported many of Maryland's counties with engineering services for all phases of MSW landfill operation from planning and design, through operations, and in

closure and post-closure phases. In particular, EA has conducted impact analyses, developed remedial action plans, and assisted in managing responses to conditions similar to Gude Landfill at Harford County's Scarboro Landfill, Baltimore County's Hernwood Landfill, and Carroll County's John Owings Landfill.

- 17) Dave Peterson asked about conformance of the current activities with the 2001 County Groundwater Protection Plan. Steve Lezinski agreed to investigate and provide a response in the near future.
- 18) Steve Lezinski confirmed that the Nature and Extent Study Report had been delivered to MDE on November 19, 2010.
- 19) The next DEP/GLCC meeting will be scheduled after MDE has provided feedback on the Nature and Extent Study Report – probably late in January 2010.

Open Action and Follow-up Items

- 11-2 GLCC inquired if the County had investigated the potential for a Brownfields Grant for the Remediation/Land Reuse project. The County has not to date.
Status: Open.
- 13-2 EA will prepare and submit to DEP for review a summary of the project status including background, status, and the remaining activities to complete the project. The HOA Presidents will distribute this summary to Derwood Station residents.
Status: Open.

Recently Closed Action and Follow-up Items

- 13-1 EA will revise the last two sentences in paragraph 5) of the minutes for Meeting No. 12 to clarify the concept.
Status: Closed. Changes are reflected in Meeting No. 12 Minutes.
- 13-3 EA will research the applicability of 40 CFR Part 258 Subpart E and report back to DEP and GLCC.
Status: Closed. A response provided via e-mail by Steve Lezinski to GLCC on 11/3/10 – the regulation is not applicable to Gude Landfill.

New Action and Follow-up Items

- 14-1 DEP will address conformance of the current monitoring program to the 2001 County Groundwater Protection Plan.
Status: Open.
- 14-2 DEP will contact the County Attorney and the County Real Estate Office concerning potential property value impacts and seller's obligations.

Status: Open

The above summation is the writer's interpretation of the items discussed at the meeting. Comments involving differences in understanding of any of the meeting items will be received for a period of thirty (30) days from the date of these meeting minutes. Clarifications will be made, as deemed necessary. If no comments are received within the specified time period, the minutes will remain as written.

ATTACHMENT 1



**Gude Landfill Remediation
Gude Landfill Concerned Citizens
Monthly Meeting No. 14**

Meeting Agenda

1. Review and Approval of GLCC/DEP Meeting Minutes (Meeting No. 13)

2. Current Gude Landfill Operations

- a. Post-Closure Care
 - Landfill Gas – Methane Mitigation Plan – Start work 12/11 or 12/13/10
 - ❖ Exceedences: W-02, W-05, W-06, W-25 and W-26
 - ❖ 21 Gas Extraction Wells to be installed
 - ❖ 5 Dewatering Sumps to be installed
 - ❖ Perched Groundwater pumping program to be initiated
- b. Leaf Storage/Transport Operations
 - The Landfill has not been utilized this season

3. Gude Landfill Remediation – Communication Plan

- a. Focused Group Meetings aside from GLCC/DEP Monthly Meetings
 - Nature and Extent Study, Remediation Alternatives, Remediation Implementation and Land Reuse
- b. Information Distribution Channels
 - DEP to HOA's to Homeowners
 - DEP to Individual Homeowners

4. Nature and Extent Study

- a. Remediation Alternatives
 - Engineered Synthetic Capping System
 - Engineered Soil Capping System
 - In-Place Barrier Trench
 - Waste Relocation
 - All options will impact stormwater and landfill gas management
- b. DEP & MDE
 - Primary communication has been during previous meetings in 2009/2010.
 - ❖ Capping default remedial action.
 - ❖ Obtain land or access to entire landfill waste disposal footprint.
 - ❖ Remediation Goals:
 - i. No MCL Exceedences at Landfill property boundary.
 - ii. No non-stormwater discharges to the waters of the State.
 - iii. No lower explosive limit (LEL) exceedances for methane at the Landfill property boundary.
 - MDE will review the Nature and Extent Study
 - MDE will provide comments or remedial recommendations

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**Gude Landfill Remediation
Gude Landfill Concerned Citizens
Monthly Meeting No. 14**

Meeting Agenda

- County to review recommendations and reach agreement with Community and MDE
- c. Remediation/Land Use Timeline (Design through Completion)
 - Projected 3-4 years
 - Remediation requirements are not known from MDE at this point

5. Next Meeting/Action Items

- a. To Close
 - 13-1: Changes reflected in Meeting No. 12 Minutes
 - 13-3: Response provided via email by Steve Lezinski to GLCC on 11/3/10
The regulation is not applicable to the Gude Landfill
- b. To Leave Open
 - 11-2
 - 13-2
- c. New Actions Items from Meeting

ATTACHMENT 2



ATTACHMENT 3



Chronology of Closed Action and Follow-up Items
as of
GLCC/DEP Meeting No. 14

- 5-01 DEP and EA to research the existence of a comprehensive database for closed landfill reuse options.
Status: Closed. EA provided a list of landfill reuse resources, which was attached to the minutes for Meeting No. 7.
- 5-02 GLCC to schedule next Derwood Community Meeting; second quarter 2010.
Status: Closed. GLCC noted that the Community will continue to be welcome at the monthly meetings, and these will be included in the DEP letter to the HOAs and the residents. Therefore, GLCC does not plan to schedule another community meeting at this time.
- 5-03 DEP to contact MDE regarding the spring and northwest slope surface water sampling, and leachate seep repairs on northwest slope.
Status: Closed. DEP and MDE met on December 21, 2009 and discussed these issues. The outcome was summarized in Attachment No. 4 of the Meeting No. 7 minutes.
- 5-04 DEP to post the recent aerial survey of the Gude Landfill on the remediation project website.
Status: Closed. The image has been posted on the website.
- 5-05 DEP to evaluate if Biochemical and Chemical Oxygen Demand (BOD/COD) can be included for analysis purposes in surface water samples.
Status: Closed. After further discussion, GLCC agreed that BOD sampling would not be conducted, since it would be difficult to discern whether the results were affected by the landfill. DEP agreed to collect samples for COD analysis. The objectives and plan for COD sampling was and agreed to between DEP and GLCC.
- 5-06 DEP to reschedule the dioxin/furan testing of the Gude Landfill gas-to-energy engine.
Status: Closed. The testing was conducted in early March 2010 but the results have not yet been reported.
- 5-07 EA to provide a list of the chemical analytes that were detected in the Gude Landfill groundwater/surface water sampling that are carcinogens.
Status: Closed. EA provided a summary of risk and carcinogenic effects for chemical analytes, which is included as Attachment No. 6 to the Meeting No. 7 minutes.
- 6-01 DEP and EA to create a list of open agenda items (i.e., action and follow-up items).
Status: Closed. This list is included in the meeting minutes and will be carried into subsequent minutes.
- 6-02 DEP and EA to finalize more precise locations of the new monitoring wells. Follow-up work with permitting agencies, utility locators, and adjoining property owners will be conducted.
Status: Closed. Additional location information finalized.

Chronology of Closed Action and Follow-up Items
as of
GLCC/DEP Meeting No. 14

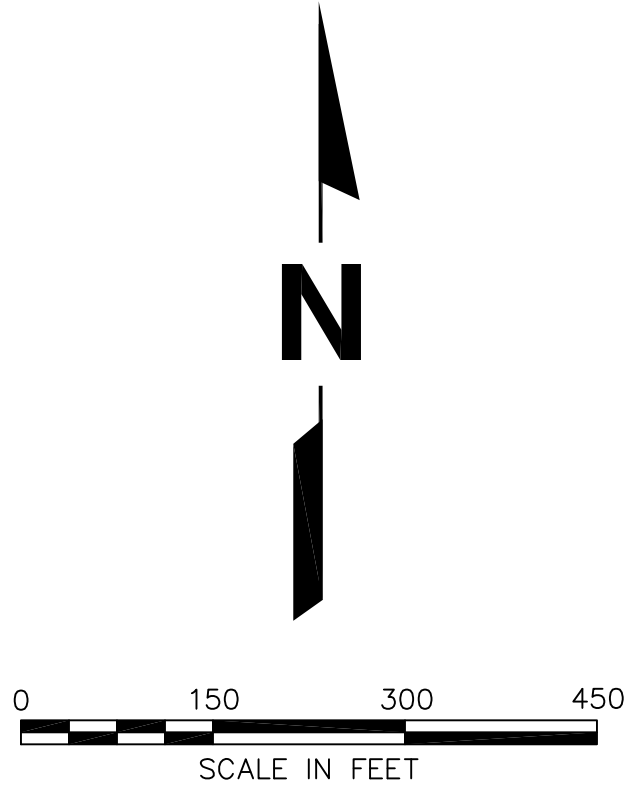
- 6-03 GLCC/DEP/EA to finalize an approach to communicate all aspects of the expanded monitoring well program to the Derwood Community.
Status: Closed. Initial letters to be sent to the HOAs, with follow-up letters to residents in the immediate area of proposed intrusive activities.
- 7-01 DEP to complete interim measures for leachate redirection at seep locations.
Status: Closed. Completed May/June 2010.
- 7-02 DEP to finalize and send letter to HOAs regarding the landfill remediation project and proposed groundwater monitoring well locations within the Community.
Status: Closed. DEP prepared the Community notification letter dated 2-26-10 for distribution to the residents via the HOA presidents.
- 7-03 DEP to obtain dioxin/furan test results for flare and engine.
Status: Closed. Results provided to GLCC June 2010.
- 8-01 EA will provide DEP with a full version of the Draft Study Plan as a PDF for posting on the website and an abbreviated PDF version for distribution to GLCC members.
Status: Closed. Received by County on August 6, 2010. County to post on remediation webpage.
- 8-02 GLCC will distribute the DEP Community Letter in a special edition of each of the three HOA newsletters, both by e-mail and standard mail, by the end of March.
Status: Closed.
- 9-01 DEP and EA will provide a list of milestones and dates to include as a schedule update with minutes from each meeting.
Status: Closed.
- 9-02 DEP and EA will identify special instructions for residents and the driller to be used during the actual well drilling for inclusion in the individual resident notification letters.
Status: Closed. Completed June 2010.
- 10-1 EA will prepare a Maryland Toxic Air Pollutant regulation compliance demonstration for dioxin/furan emissions from the flares and engines at Oaks and Gude.
Status: Closed. DEP will post on the Remediation webpage.
- 10-2 GLCC will meet independently on June 20, 2010 to discuss the process of early integration of end use objectives into the corrective action planning process and will propose a pathway and procedure to DEP at the July 8, 2010 DEP/GLCC meeting.
Status: Closed. During Meeting No. 11, GLCC provided the County guidance on preferred end uses from the Community for the Gude Landfill site.

Chronology of Closed Action and Follow-up Items
as of
GLCC/DEP Meeting No. 14

- 11-1 GLCC requested Bob Hoyt, Director of DEP to attend the next GLCC/DEP monthly meeting on September 15, 2010 to discuss the Request for Expression of Interest (REOI).
Status: Closed.
- 12-1 Using the risk evaluation methodology, EA will back calculate contaminant concentrations that would represent a human risk concern for vapor intrusion from groundwater into indoor air.
Status: Closed. The calculation was made by EA and included in the analysis and provided to GLCC.
- 13-1 EA will revise the last two sentences in paragraph 5) of the minutes for Meeting No. 12 to clarify the concept.
Status: Closed. Changes are reflected in Meeting No. 12 Minutes.
- 13-3 EA will research the applicability of 40 CFR Part 258 Subpart E and report back to DEP and GLCC.
Status: Closed. A response was provided via e-mail by Steve Lezinski to GLCC on 11/3/10 – the regulation is not applicable to Gude Landfill.

ATTACHMENT 4





* EXTRACTION WELLS 154 - 167 TO BE INSTALLED AT A LATER DATE/TIME (TBD).

SCS ENGINEERS		GUDE LANDFILL EXPANSION SITE PLAN		REVISION		DATE	
STEARN, CONRAD AND SCHMIDT CONSULTING ENGINEERS, INC.		DRAFT					
11560 ROGER BACON DRIVE - RESTON, VA 20190		WELLFIELD EXPANSION SITE PLAN					
PH. (703) 471-6160 FAX. (703) 471-6676		PROJECT TITLE					
PROJ. NO. 06207031.02		SHEET TITLE					
DWG. BY: DD		GUDE LANDFILL					
CHK. BY: MK		2011 WELLFIELD EXPANSION					
APP. BY: MK		CLIENT					
CADD FILE: 2011 EXP.		GUDE LANDFILL					
DATE: DEC. 2010		MONTGOMERY COUNTY, MD					
SCALE: AS SHOWN							
DRAWING NO.							
01 of 1							

ATTACHMENT 5



Montgomery County Department of Environmental Protection

Gude Landfill Remediation and Reuse

Communication Plan

I. COMMUNICATION FROM COUNTY DEP TO COMMUNITY

a. GLCC/DEP Monthly Meetings

- 1) Actions to Date
 - Held 14 meetings (since 6-2009)
 - Created Remediation Webpage for information sharing
- 2) Actions Forward
 - Continue monthly GLCC/DEP meetings
 - Reiterate monthly meetings are open to anyone in the Community
 - Identify critical path topics for larger Community meetings
 - Regularly update Remediation Webpage
 - ❖ Possible placement of hard-copy documents in public library

b. Community/Focus Group Meetings

- 1) Actions to Date
 - Held 1 larger Community meeting (9-2009)
- 2) Actions Forward
 - Identify critical path topics for larger Community/Focus Group meetings
 - Hold Community/Focus Group Meetings based on topic and area of impact
 - ❖ Nature and Extent Study Report (NESR) / Remediation Feasibility Memorandum
 - ❖ Remediation Alternatives / Land Swap with M-NCPPC
 - ❖ Request for Expression of Interest (REOI) – **on hold until MDE review of NESR**
 - Development of REOI
 - Participation in REOI Review is Limited/Confidential
 - Full information disclosure available after full REOI process is complete
 - ❖ Remediation Implementation (Construction)
 - ❖ Land Reuse
 - ❖ Future Landfill Site Operation and Maintenance
- 3) How to Gauge Community/Focus Group Interest?

c. Information Distribution Channels

- 1) Remediation Webpage:
 - <http://www.montgomerycountymd.gov/swstmpl.asp?url=/content/dep/solidwaste/facilities/gude/index.asp>
- 2) DEP to GLCC
 - GLCC@hollybrooke.org
- 3) DEP to Derwood Station Home Owner Associations (HOAs) to Home Owners
- 4) DEP to Individual Home Owners

Montgomery County Department of Environmental Protection
Gude Landfill Remediation and Reuse
Communication Plan

II. COMMUNICATION FROM COMMUNITY TO COUNTY DEP

a. GLCC/DEP Monthly Meetings

- 1) Actions to Date (see I.a. above)
- 2) Actions Forward (see I.a. above)

b. GLCC Methods of Communication

- 1) Actions to Date
 - Contact County Via Phone/Email
 - ❖ Stephen Lezinski, Engineer III
 - Tel. 240-777-6590
 - Email. steve.lezinski@montgomerycountymd.gov
 - ❖ Peter Karasik, Section Chief, Central Operations
 - Tel. 240-777-6569
 - Email. peter.karasik@montgomerycountymd.gov
- 2) Actions Forward
 - Create a Question/Answer Forum on the Remediation Webpage for Community
 - Linked to County Remediation Project Managers Email (Lezinski & Karasik)
 - County can responded directly to interested party or a log of questions/answers can be posted on the Remediation Webpage
 - ❖ Method to gauge Community Interest

Montgomery County Department of Environmental Protection
Gude Landfill Remediation and Reuse
Communication Plan

III. COMMUNICATION FROM DEP TO OTHER ENTITIES

a. Entities of Interest

- 1) Maryland Department of the Environment (MDE) – Regulatory Entity
- 2) Maryland-National Capital Park and Planning Commission (M-NCPPC) – Mandatory Referral Process and Neighboring Property Owner
- 3) Transcontinental/Williams Gas Pipeline Co. (right-of-way) – Neighboring Property Owner
- 4) Columbia Gas Co./Fiber Optic Line (right-of-way) – Neighboring Property Owner
- 5) Other Interested Entities
 - County Council
 - County Executive
 - County Coalition for the Homeless (Men's Shelter)
- 6) Other Permitting Entities
 - County Department of Permitting Services
 - Army Corps of Engineers
 - Other State/Local Entities for streams, stormwater, wetlands, forest stand, endangered species, etc.

b. DEP Methods of Communication

- 1) Formal Letters, Meetings, Telephone, and Email, etc.
- 2) Submission of Investigations, Reports, and Permits, etc.

c. Communication from Other Entities to DEP to Community

- 1) DEP will share all communications, reviews, comments, responses and agreements, etc. related to:
 - Nature and Extent Study Report / Remediation Feasibility Memorandum
 - Remediation Alternatives / Land Swap with M-NCPPC
 - Remediation Implementation
 - Land Reuse
 - Future Landfill Site Operation and Maintenance

Montgomery County Department of Environmental Protection
Gude Landfill Remediation and Reuse
Communication Plan

IV. COMMUNICATION SCHEDULE

a. Initiation

- 1) Formal Communication with Community and MDE started mid-late 2008
- 2) GLCC/DEP Monthly Meetings started 6-2009

b. Continuance

- 1) Formal Communication with Community and Interested Entities will continue in Stages
 - GLCC/DEP Monthly Meetings
 - Nature and Extent Study Report / Remediation Feasibility Memorandum
 - Remediation Alternatives / Land Swap with M-NCPPC
 - Remediation Implementation
 - Land Reuse
 - Future Landfill Site Operation and Maintenance

c. Timeline

- 1) Remediation/Land Reuse = 3-4 years
- 2) Landfill Site Operation and Maintenance = 20-30 years ⁽⁺⁾

ATTACHMENT 6



Gude Landfill Remediation – Schedule (rev.4)
(12-9-10)

Phases of Work for Remediation	Preliminary Schedule	Duration	Status
0. Survey and Limit of Waste Delineation	Aug. 2009 – Jan. 2010	6 Months	Complete
I. Nature and Extent Study	Sept. 2009 – Nov. 2010	14 Months	Complete (MDE Review)
II. Remediation Alternatives Investigation and Preparation of Formal Remediation Plan	Dec. 2010 – Mar. 2011	4 Months	On-going
III. Prepare Design, Permitting, and Construction Bid Documents for Selected Remediation Alternative(s). This work may be phased.	Apr. 2011 – Jul. 2012	15 Months	Future
IV. Construction of Stage I Remediation Work.	Aug. 2012 – Aug. 2013	12 Months	Future
V. Construction of Stage II Remediation Work	Aug. 2013 – Aug. 2014	12 Months	Future
VI. Construction of additional Stages of Remediation Work and Site Reuse Options.	To be determined	---	---

Note:

1. Request for Expression of Interest (REOI) process likely to occur in conjunction with Phase III. This may add 6 months onto the schedule.